

ABSTRACT

[0044] Disclosed is a circuit and method for reducing output swing in a sigma delta modulator. The quantizer output swing reduction circuit and method of the present invention advantageously enables the modulator to have a larger input/output swing range without degrading the SNR and SFDR performance. One embodiment of the present invention comprises a conventional sigma-delta modulation circuit (100) and a quantizer swing reduction block (210). The quantizer swing reduction block (210) comprises an input signal V_x (216), a signal processing block (214) with transfer function H_3 and another signal processing block (215) with transfer function $H_2 \cdot H_3$.